

4. That the invention alert shown in Exhibit A was prepared prior to December 22, 2000 and all dates masked as "DATE" in Exhibit A are prior to December 22, 2000;

5. That we diligently pursued the subject matter of the pending claims from a time beginning before December 22, 2000 until filing of the present application on July 23, 2001;

6. That we submitted the invention alert shown in Exhibit A to our in-house legal department on a date prior to December 22, 2000;

7. That our in-house legal department submitted the invention alert shown in Exhibit A to an outside legal firm for prosecution of the above identified application prior to December 22, 2000;

8. That subsequent reduction to practice of the invention occurred at latest on July 23, 2001 with the filing of the above identified application.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 11/1/2006


Li-Qun Xia

EXHIBIT “A”

INVENTION ALERT FORM

INVENTION ALERT FORM

DM / JW
DD/LOWK
2445

TO: Gaile Bailey
Extension:

M/S 2061
32724

MASK

ALERT NO: _____

Current Date:

Mask

0005619

CIRCLE ONLY ONE FROM EACH TOP SECTION:

1) OWNER 2) DIVISION 3) FINANCIAL COST CENTERS(PGB)

PLEASE SUBMIT ONE ORIGINAL, SIGNED DOCUMENT FOR RECORDING. IF THIS IS A COPY OF A PREVIOUSLY SUBMITTED ALERT, PLEASE MARK IT ACCORDINGLY

OWNER:	AMAT	AMT	AMSEA	AMK	AMJ	AKT
ALT	PDD	FCH	OTHER	FINANCIAL	MD	ACT
0723	KPU1	METAL	IBSS	CORE	COPPER	OPAL
0723	0166	0881	0676	0793	2492	
ORION	KPU3	SILICON	SMO	ATD	PLUG	ORBOT
2471	0281	0916	GASFLOW 1659	1301	2492	
CAP	KPU8	IPS	SMO	GREEN	LINER/ BARRIER	APD
2512	0195	*0521	PUMPS 1651	2590	2492	2613
SWIFT	PSI	COM ENG	WMO/Austin	ECD/CU		ICT
1755	2442	1419	2081	2492		
EPI	CMP	SMO	PRP	COMMON		
2470	1399	1659	1654	2492		
TPO*	LOWK	CORE TECH	300mm	IMS		
0584	2445	1245	2199	2492		
				BASELINE		
				2492		

*TPO - RTP/HTF/OXDL

**IPS - MXP/RPS/HDP

Please use separate attachments for any answers that don't fit on the form, especially for questions 3-8. If the answer to a question is "NONE", please write "NONE" rather than leaving the answer blank.

- Title of Invention (please print clearly):
Selective Etching of Organosilicate Films Over Oxide Stop Layers
- Inventors-Names only-(please print clearly and provide complete information at Section 9)

Huong Thanh Nguyen

Michael Scott Barnes

Li-Qun Xia

3. Earliest dates and model names of all Applied products incorporating the invention which have been offered for sale or are expected to be offered for sale:
4. If the invention has been demonstrated or described to persons other than Applied employees, for each disclosure please provide the earliest date, name of company, a brief description of what was disclosed and the purpose of the disclosure. Attach a copy of any related non-disclosure agreements:
5. If future disclosures like those in Question #4 are expected to occur within the next 12 months, please provide the anticipated date, type of information to be disclosed, and purpose of the disclosure: NONE []
6. Describe any other known designs or processes, whether actually implemented or merely proposed in a publication, which could be considered similar to your invention or which constitute the state-of-the-art improved upon by your invention: If described in a publication, attach a copy of same or provide a citation.

7. List each feature of the invention which you consider novel and non-obvious. Describe the advantages of each novel feature in comparison with the state-of-the-art approaches which are most similar to your invention:

- a) The use of a TEOS or silane oxide dielectric stop layer for dual damascene structure with organosilicate film as the main dielectric
- b) Etching of organosilicate dielectric material with chemistry containing significant levels of hydrogen containing fluorocarbon gases (pure H₂ could be added to the chemistry as well)

8. Describe the invention, preferably with reference to attached drawings:

- a) Construct a dual damascene structure with an organosilicate dielectric for the main film and a TEOS or silane oxide as a stop layer(s).
- b) Etch the main dielectric film with chemistry containing significant levels of hydrogen containing fluorocarbon gases (pure H₂ could be added to the chemistry as well)
- c) Etch stop layer with reduced levels of hydrogen containing fluorocarbon gases

ATTACH ADDITIONAL SHEETS TO DESCRIBE INVENTION AS NEEDED

9. Provide the following information for EACH inventor:

Inventor #1:
 Legal Name: Huong Thanh Nguyen - Employee # [REDACTED] Mail Stop [REDACTED]
 Work Phone: [REDACTED] Fax No.: [REDACTED]
 Job Title: [REDACTED]
 Citizenship: [REDACTED]
 Home Address: [REDACTED]
 Manager: [REDACTED] Title: [REDACTED]
 Div. Manager: [REDACTED] Title: [REDACTED]
 Product Group: [REDACTED] Dept #: [REDACTED]

Inventor #2:
 Legal Name: Michael Scott Barnes Employee # [REDACTED] Mail Stop [REDACTED]
 Work Phone: [REDACTED] Fax No.: [REDACTED]
 Job Title: [REDACTED]
 Citizenship: [REDACTED]
 Home Address: [REDACTED]
 Manager: [REDACTED] Title: [REDACTED]
 Div. Manager: [REDACTED] Title: [REDACTED]
 Product Group: [REDACTED] Dept #: [REDACTED]

Inventor #3:
 Legal Name: Li-Qun Xia Employee # [REDACTED] Mail Stop [REDACTED]
 Work Phone: [REDACTED] Fax No.: [REDACTED]
 Job Title: [REDACTED]
 Citizenship: [REDACTED]
 Home Address: [REDACTED]
 Manager: [REDACTED] Title: [REDACTED]
 Div. Manager: [REDACTED] Title: [REDACTED]
 Product Group: [REDACTED] Dept #: [REDACTED]

FOR ADDITIONAL INVENTORS, PLEASE COMPLETE AND ATTACH ADDITIONAL SHEET AS NEEDED.

ADDITIONAL INVENTORS:

Inventor # :		Employee #	Mail Stop
Legal Name:			
Work Phone	Fax No.:		
Job Title:			
Citizenship			
Home Address			
Manager:	Title:		
Div. Manager	Title:		
Product Group:	Dept #:		

Inventor # :		Employee #	Mail Stop
Legal Name:			
Work Phone	Fax No.:		
Job Title:			
Citizenship:			
Home Address			
Manager:	Title:		
Div. Manager	Title:		
Product Group:	Dept #:		

Inventor		Employee #	Mail Stop
Legal Name:			
Work Phone	Fax No:		
Job Title:			
Citizenship:			
Home Address:			
Manager	Title:		
Div. Manager	Title:		
Product Group:	Dept #:		

10. Signature, date and **PRINTED** name of each inventor plus two witnesses who have read and understood this Invention Alert form:

Inventors:

Huong T. Nguyen
Printed Name

[REDACTED]
Date

Chauldany
Signature

Michael Berner
Printed Name

[REDACTED]
Date

[REDACTED]
Signature

Li-An Xid
Printed Name

[REDACTED]
Date

[REDACTED]
Signature

Printed Name

Date

Signature

Printed Name

Date

Signature

Printed Name

Date

Signature

Witness:

Printed Name

Date

Signature

Printed Name

Date

Signature

Return to: Gaile Bailey
Mail Stop: 2061
Fax No.:: 986-3090
Extension: 563-2724